

**Introduced by Senator Monning**

February 26, 2015

---

An act to add Article 17 (commencing with Section 25259) to Chapter 6.5 to Division 20 of the Health and Safety Code, and to add Chapter 2 (commencing with Section 42030) to Part 3 of Division 30 of the Public Resources Code, relating to public resources.

**LEGISLATIVE COUNSEL'S DIGEST**

SB 489, as introduced, Monning. Public resources: photovoltaic modules.

The California Integrated Waste Management Act of 1989, administered by the Department of Resources Recycling and Recovery, generally regulates the disposal, management, and recycling of solid waste.

This bill would prohibit an end-of-life photovoltaic module, as defined, from being disposed of at a solid waste disposal facility or a hazardous waste disposal facility, except that it would permit materials that have been separated from an end-of-life photovoltaic module to be disposed of at a solid waste disposal facility, if those materials are nonrecyclable and are not identified as hazardous waste. The bill would make a person who knowingly violates this provision liable for a civil penalty not to exceed \$2,500 for each violation, as specified. The bill would specify exceptions to this provision, including that disposal of an end-of-life photovoltaic module from a photovoltaic system subject to a contractual or regulatory obligation as of January 1, 2016, to dispose of the system's end-of-life photovoltaic module at a solid waste disposal facility shall be deemed to comply with this provision if a reasonable effort to recycle or reuse material from the end-of-life photovoltaic module is made by the owner or operator of the system.

The Hazardous Waste Control Law, among other things, vests the Department of Toxic Substances Control (department) with the authority to regulate the generation and disposal of hazardous waste. Under now-expired authority, the department adopted regulations exempting specified hazardous waste management activities from certain statutory requirements related to hazardous waste management. These regulations are to remain valid unless repealed. A violation of the Hazardous Waste Control Law, including a regulation adopted pursuant to that law, is a crime. Under existing law, the hazardous wastes that are deemed exempt from the Hazardous Waste Control Law are known as “universal waste” and are regulated pursuant to universal waste management provisions.

This bill would authorize the department to adopt regulations to designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management. The bill would authorize the department to revise the regulations as necessary. Because a violation of these regulations would be a crime, this bill would impose a state-mandated local program.

This bill would prohibit an end-of-life photovoltaic module that is identified as hazardous waste from being disposed of at a solid waste disposal facility or a hazardous waste disposal facility, except that it would permit materials that have been separated from an end-of-life photovoltaic module that is identified as hazardous waste to be disposed of at a solid waste disposal facility or hazardous waste facility, if those materials are nonrecyclable and are not identified as hazardous waste. The bill also would provide for a specified exception to this provision. Because a violation of these provisions would be a crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: yes.

*The people of the State of California do enact as follows:*

1     SECTION 1. (a) The Legislature finds and declares all of the  
2     following:

1 (1) California's policies, including the policies reflected in the  
2 California Solar Initiative (Chapter 8.8 (commencing with Section  
3 25780) of Division 15 of the Public Resources Code), the state's  
4 net energy metering program, and the California Renewables  
5 Portfolio Standard Program (Article 16 (commencing with Section  
6 399.11) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities  
7 Code), have made California the leading state in the installation  
8 of solar energy systems by providing ratepayer-funded incentives  
9 to eligible solar energy systems, resulting in substantially increased  
10 utilization by homes, businesses, and utilities.

11 (2) Existing solar energy systems use photovoltaic technology  
12 to capture sunlight and convert it into electricity until the end of  
13 their useful lives, estimated to be between 25 and 40 years. Today  
14 a wide variety of solar photovoltaic technologies, manufactured  
15 using processes and materials similar to those of the  
16 microelectronics industry, contribute to California's solar energy  
17 portfolio.

18 (3) The numerous renewable and customer-generated solar  
19 programs in California have led to a rapid expansion of solar  
20 energy systems and have given rise to an emerging photovoltaic  
21 industry. An increasing amount of end-of-life photovoltaic panels  
22 can be expected from 2020 onwards in California. It is critical to  
23 consider the end-of-life issues associated with photovoltaic panels.  
24 Recycling is the most sustainable way to manage end-of-life  
25 photovoltaic panels.

26 (b) It is the intent of the Legislature to do all of the following:

27 (1) Foster a comprehensive and innovative system for the reuse,  
28 recycling, and proper and legal disposal of end-of-life photovoltaic  
29 panels.

30 (2) Encourage the photovoltaic panel industry to make  
31 end-of-life management of photovoltaic panels convenient for  
32 consumers and the public, to ensure the return and recycling of  
33 photovoltaic panels, which is the most efficient and  
34 environmentally safe disposition of end-of-life photovoltaic panels.

35 (3) Reduce the likelihood of improper disposal by prohibiting  
36 end-of-life photovoltaic panels from entering landfills.

37 (c) It is further the intent of the Legislature that photovoltaic  
38 panels, to the greatest extent feasible, should be designed for  
39 extended life, repair, and reuse, and that collection and recycling

1 services should be provided for the maximum feasible number of  
2 end-of-life photovoltaic panels.

3 SEC. 2. Article 17 (commencing with Section 25259) is added  
4 to Chapter 6.5 of Division 20 of the Health and Safety Code, to  
5 read:

6  
7 Article 17. Photovoltaic Modules  
8

9 25259. (a) Except as provided in subdivision (b), a person  
10 shall not knowingly dispose of an end-of-life photovoltaic module  
11 that is identified as hazardous waste at a solid waste disposal  
12 facility or hazardous waste disposal facility in the state.

13 (b) Materials that have been separated from an end-of-life  
14 photovoltaic module that is identified as hazardous waste, if those  
15 materials are nonrecyclable and are not identified as hazardous  
16 waste, may be disposed of at either a solid waste disposal facility  
17 or a hazardous waste disposal facility.

18 (c) Materials that have been separated from an end-of-life  
19 photovoltaic module, if those materials are nonrecyclable and are  
20 identified as hazardous waste, shall only be handled at an  
21 authorized hazardous waste management facility.

22 (d) An owner or operator of a solid waste disposal facility or  
23 hazardous waste disposal facility shall not be found in violation  
24 of this section if the owner or operator has done all of the  
25 following:

26 (1) Made a good faith effort to comply with this section.

27 (2) Posted, in a conspicuous location at the facility, a sign stating  
28 that end-of-life photovoltaic modules shall not be accepted at the  
29 facility.

30 (3) Notified, in writing, all commercial and government  
31 collectors and haulers known to haul waste to each respective  
32 facility that end-of-life photovoltaic modules shall not be accepted  
33 at the facility.

34 (e) Nothing in this section authorizes hazardous waste to be  
35 disposed of at a facility that is not authorized to receive and handle  
36 hazardous waste.

37 (f) The department shall develop ways to inform hazardous  
38 waste disposal facilities and the public of the requirements of this  
39 section.

(g) For purposes of this section, “end-of-life photovoltaic module” has the same definition as in Section 42030 of the Public Resources Code.

25259.1. The department may, by regulation, designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management. The department may revise these regulations as necessary.

SEC. 3. Chapter 2 (commencing with Section 42030) is added to Part 3 of Division 30 of the Public Resources Code, to read:

## CHAPTER 2. PHOTOVOLTAIC MODULES

42030. For purposes of this chapter, the following definitions shall apply:

(a) “End-of-life photovoltaic module” means a photovoltaic module that has been used and is removed from service in the state and is a waste, as defined in Section 25124 of the Health and Safety Code. A photovoltaic module that is designated for refurbishment or reuse is not an end-of-life photovoltaic module.

(b) “Photovoltaic module” means a device that collects energy from the sun for the purpose of converting light into electricity for general electricity use, but does not include solar-powered electronic devices that have one or more solar cells incorporated into their structure.

42031. (a) Except as provided in subdivision (b), a person shall not knowingly dispose of an end-of-life photovoltaic module at a solid waste disposal facility or a hazardous waste disposal facility in the state.

(b) Materials that have been separated from an end-of-life photovoltaic module, if those materials are nonrecyclable and are not identified as hazardous waste, may be disposed of at a solid waste disposal facility.

(c) Disposal of an end-of-life photovoltaic module from a photovoltaic system in the state that is subject to a contractual or regulatory obligation by the owner or operator of the system as of January 1, 2016, to dispose of the system’s end-of-life photovoltaic module at a solid waste disposal facility, shall be deemed to comply with this section if a reasonable effort to recycle or reuse material from the end-of-life photovoltaic module is made by the owner or

1 operator of the system, unless that photovoltaic module is identified  
2 as hazardous waste.

3 (d) A person who knowingly violates this section shall be liable  
4 for a civil penalty not to exceed two thousand five hundred dollars  
5 (\$2,500) for each violation. A city, a county, a city and county, or  
6 the state may impose the civil liability, and any civil penalties  
7 collected pursuant to this subdivision shall be paid to the office of  
8 the city attorney, city prosecutor, district attorney, or Attorney  
9 General, whichever office brought the action. The penalties  
10 collected pursuant to this section by the Attorney General may be  
11 expended by the Attorney General, upon appropriation by the  
12 Legislature, to enforce this chapter.

13 (e) An owner or operator of a solid waste disposal facility or  
14 hazardous waste disposal facility shall not be found in violation  
15 of this section if the owner or operator has done all of the  
16 following:

17 (1) Made a good faith effort to comply with this section.

18 (2) Incorporated the identification and removal of end-of-life  
19 photovoltaic modules as part of the facility's load check program.

20 (3) Posted, in a conspicuous location at the facility, a sign stating  
21 that end-of-life photovoltaic modules shall not be accepted at the  
22 facility.

23 (4) Notified, in writing, all commercial and government  
24 collectors and haulers known to haul waste to each respective  
25 facility that end-of-life photovoltaic modules shall not be accepted  
26 at the facility.

27 (f) Nothing in this section authorizes hazardous waste to be  
28 disposed of at a facility that is not authorized to receive and handle  
29 hazardous waste.

30 (g) The department shall develop ways to inform solid waste  
31 disposal facilities and the public of the requirements of this section.

32 (h) For purposes of this section, "solid waste disposal facility"  
33 does not include a transfer station.

34 SEC. 4. No reimbursement is required by this act pursuant to  
35 Section 6 of Article XIII B of the California Constitution because  
36 the only costs that may be incurred by a local agency or school  
37 district will be incurred because this act creates a new crime or  
38 infraction, eliminates a crime or infraction, or changes the penalty  
39 for a crime or infraction, within the meaning of Section 17556 of  
40 the Government Code, or changes the definition of a crime within

1 the meaning of Section 6 of Article XIII B of the California  
2 Constitution.

O